The nerves of the sheaths do not wholly belong to the system of vegetable life, (the organic nervous system,) but also, in part, to the cerebro-spinal system. The fact is completely beyond dispute, for I have two or three times succeeded in following nerves clearly arising from the root, and curving upwards, to arrive at the sheath of the motor nerves. Sometimes the nerves, having gained the sheath, proceed upwards; sometimes they descend; sometimes they may be followed to the inside of the dura mater; at other times they remain outside of it. In most cases I have succeeded in finding but one ramification of the nerves; once I have seen a nerve-filament, consisting of nearly eight or ten primitive fibres, mount and divide into two portions, one of which continued its course, whilst the other descended towards the periphery, forming an arch, such as is observed to be the termination of nerves, in numerous cases."—*Prov. Med. and Surg. Journ.*, Nov. 17.

4. *On the Pitch (Timbre) of the Human Voice.*—M. SEGOND communicated to the French Academy of Sciences a memoir on the modifications of the pitch of the human voice. The following are the conclusions at which he arrived:—

1. The timbre is not, like the tone and intensity, a simple quality of sound, but depends always on several circumstances collectively.

2. In the vocal apparatus the modifications of the pitch result from the general state of the system, and from the action of all the parts of the vocal apparatus; but it is particularly in the vocal tube that the cause of the modifications is to be found.

3. The pharynx, the mouth, and the nasal cavities, by acting more or less apart, or by combining in action, give to a sound very various timbres. If the vocal tube has a large dimension, the sound augments in volume, and becomes grave or dull. The pitch is, on the contrary, so much the clearer or shrill, as the dimensions of the tube are smaller.

4. The clear and the deep timbre have different degrees: their production does not result from a particular form of the tube. The fixity of the larynx, generally given as characteristic of a deep note, may, to an equal degree, belong also to the clear timbre; for if one executes a roulade or shake in a low note, the larynx offers in every respect its usual mobility.

5. The timbre of the improperly called guttural note is produced whenever the glottis vibrates with a very short tube.

6. The vowels, which may be considered as so many timbres, correspond to the form and dimensions of the buccal cavity.

7. When a sound traverses the nasal cavities, it may present three principal varieties. In the first case, the mouth being shut, if the sound is driven through the nasal cavities, the latter give passage to it without being able to arrest or to retain it, and the timbre is but slightly nasal. In the second case, if the sound pursue its course through the mouth, whilst the external orifice of the nasal fossæ is closed, the timbre becomes extremely nasal if the sound be directed into the cavity of the nose, for then it is retained at every part. In the third case, if the sound be directed into the same cavity whilst the mouth and nose are both open, it will at once escape from the two; but the sound will ring in the posterior part of the nasal fossæ. In this last case, the timbre will be less nasal than in the preceding, but much more so than in the first. One sees from this, that we must carefully distinguish the sound which escapes through these cavities, and that which rings in them. It is in this distinction that we find an explanation of all the phenomena of the nasal voice.—*Lancet*, Sept. 11, 1847.

5. *Intermittent Pulse coincident with Health.*—M. BIDARD, d'Arras, gives an account of a man, above the middle stature, of the sanguine temperament, and of a strong constitution, and who had never suffered from any illness, except from inflammatory fever when about twelve years old, but the pulsation of whose heart and arteries were very abnormal. In 1826, M. Bidard was called to him on account of a contused wound of the left leg, from a kick of a horse, but which affected him very little. On that occasion, M. Bidard felt his pulse, when he noticed that after every two pulsations there was an interval of repose for nearly the length of one pulsation. There were forty-two pulsations and twenty-one periods of repose in a minute. The same condition was observed also in other arteries besides the radial. Upon listening to the heart's sounds, there were two normal and successive con-

tractions, and then an interval of rest, perfectly isochronous with that remarked in the pulse. On further auscultation and percussion, nothing otherwise abnormal could be detected about the heart and vessels, nothing at all to explain the intermittence. The man stated that this peculiar condition of his pulse was also remarked by the medical man who attended him in his only illness when a boy. From that time up to the period of his decease, lately—*i. e.*, for twenty years—M. Bidard has frequently marked the constancy of this anomalous circulation, as also have many other physicians. Death followed at the age of eighty-four, apparently as a consequence of old age, without any well characterized malady, but with a gradual failing of sight, hearing, and of the vital powers generally, and with the supervention of extreme anorexia.

After death, the lungs were found healthy, with a few pleural adhesions; the pericardium contained but little serum; the ascending and descending aorta, and the venæ cavæ, preserved their integrity; the heart was of a proportionate volume with the other viscera, and without any apparent anatomical lesion; the vessels were normal in their distribution; so also were the nerves.—*Prov. Med. and Surg. Journ.*, from *Gaz. Méd.*, Sept. 4.

[Similar cases are not uncommon. We have seen one case in which the pulse is always intermittent, except under the excitement of febrile action.]

6. *Vulvo-Vaginal Gland.*—M. Huguier has given a description of a gland situated at each side of the junction of the vulva to the vagina. It was discovered by Gaspard Bartholin, and was generally described by older anatomists; but of late its existence has been almost forgotten. According to M. Huguier, this gland is about the size and form of an apricot kernel, and is provided with an excretory duct, about seven or eight lines in length, the external aperture of which is situated in the angle between the vulva and the border of the hymen. This gland is small until puberty, when it is developed with the other organs of generation; it becomes turgid during sexual excitement, and secretes a quantity of clear mucus-looking fluid, which it is said to ejaculate with some force. M. Huguier agrees with former anatomists in regarding this gland as closely analogous to Cowper's gland in the male subject; for it is situated in about the same part of the perineum as this latter is, and presents the same anatomical relations and connections. It is an appendage to the vulvo-vaginal cavity, a part which is analogous to the urethra in the male; it receives the materials for its nutrition, and its sensation from the same vascular and nervous sources as does Cowper's gland; it presents also many varieties in form, size, and situation, and it may be absent on one or both sides, as is often the case with Cowper's gland.—*Monthly Journ. Med. Sci.*, Oct. 1847, from *Archives d'Anatomie.*

7. *Variations in the Quantity of Fat in the Human Lungs.*—M. Natalis Gaillot, having examined the chemical composition of the lungs under various circumstances, especially of disease, finds, among other points, that the pulmonary tissue of the fœtus contains a much larger quantity of fatty matter before than after birth: the amount begins to diminish with the first commencement of respiration. At the end of intra-uterine life, and just before the respiratory functions commence, the quantity of fatty matter in the tissues of dried lung may amount to 10, 12, 15, or 18 parts in 100: but when respiration has commenced, the proportionate quantity rapidly falls, and seldom exceeds 6 per cent. He finds, also, that in all affections of the chest, the consequence of which is a temporary or permanent obstruction to the respiratory functions over a greater or less extent of the pulmonary surface, the proportion of fatty matters increases in those parts which have become impermeable to air. The quantity of fatty matter may, in such cases, amount to 15, 20, 30, 40, or even 50 parts, in 100; while the healthy portions of the same organs usually do not contain more than about 10 per cent. This is observed at all periods of life, from the earlest infancy to extreme old age.—*Lond. Med. Gaz.*, Oct. 1847, from *Comptes Rendus*, July 12th, 1847.

8. *Congenital Deficiency of the Gall-Bladder.*—An example of this malformation is recorded by Mr. E. Canton, Demonstrator of Anatomy, in the *Lancet*, Oct. 16. He met with it in examining the abdomen of a female, aged sixty-five, who had